

# **BUREAU OF ENVIRONMENT CONFERENCE REPORT**

**SUBJECT:** Monthly Natural Resource Agency Coordination Meeting

**DATE OF CONFERENCE:** September 21, 2005

**LOCATION OF CONFERENCE:** John O. Morton Building

**ATTENDED BY:**

**NHDOT**

Charlie Hood  
Mark Hemmerlein  
Bob Landry  
Kevin Nyhan  
Bill Oldenburg  
Craig Drouin  
Cathy Goodmen  
David Smith  
Bob Decker  
Nancy Mayville  
Jon Evans  
Ram Maddali  
Alex Vogt  
Mark Whitemore  
Matt Hill  
Cathy Goodmen

**Federal Highway  
Administration**  
Bill O'Donnell

**NH Wetlands Bureau**  
Gino Infascelli

**EPA**  
Mark Kern

**NH Fish and Game  
Department**  
Bill Ingham  
Bruce Smith

**CNHRPC**  
Nick Alexander

**SNHPC**  
Tom White

**NMFS**  
Mike Johnson

**NH Coastal Program**  
Chris Williams

**McFarland-Johnson**  
Vicky Chase  
Jed Merrow  
Mike Long

**DES**  
Chris Williams  
Becky Ohler

**VHB**  
Jake Tinus  
Peter Walker

**Smart Asso.**  
Bill Grace

**CLD**  
Jamie Paine

**Fay-Spoff. & Thorn.**  
Peter Howe

**Wilber Smith Assoc.**  
Tom Errico

**Normandeau**  
Lee Carbonneau

**HNTB**  
Addie Kim

**Dover**  
Bruce Woodruff

## **NOTES ON CONFERENCE:**

### **Manchester-Hooksett-Bow, X-A000(112), 13917**

Bob Landry briefly introduced the project and discussed the project schedule.

Wilbur Smith Associates (WSA) presented an overview of the study area, study intersections, operationally deficient intersections and roadway segments, speed survey results, and a summary of possible improvement strategies. Details of the presentation included:

- The study area begins in Manchester at Exit 7 of I-293 and extends northerly on NH Route 3A to the Bow/Concord town boundary.
- The study intersections include: Hall Street/I-89; Grandview Road; River Road; Robinson Road; Dunklee Road; Johnson Road; Pine Street; Main Street; Riverside Street; Hackett Hill

Road(Hooksett), Cross Road; Quality /Technology Drives; Exit 10 of I-93; and Hackett Hill Road(Manchester).

- Intersection Deficiencies include: Main Street; Riverside Street; and Hackett Hill Road (Hooksett).
- Roadway Deficiencies include: vicinity of Bow/Hooksett town boundary; between Pine Street and Main Street; and north of Quality/Technology Drives.
- Speed data collected at three locations within the study area indicates vehicles speeds general exceed the posted speed limit.

Bill Grace provided an overview of existing resources along the corridor including wetlands, floodplains, farmlands, fish & wildlife, water bodies/water quality, parks & conservation lands, and hazardous materials. Bill also presented possible wetland mitigation sites.

Comments included:

- For subsequent presentations, the graphics should be revised to better highlight the NH 3A Corridor.
- It was suggested that the Restoration of the Bow Bog Brook be considered (it was relocated by the Power Plant).
- Hooksett may have changed some of their wetland status and that the study should account for this.

#### **Bedford-Manchester-Londonderry, DPR-F-0047(001), 11512-(Airport Access Road)**

Cathy Goodmen and Jed Merrow presented the plan for the Wildlife corridor under Route 3A. There were no objections to the design.

#### **Portsmouth-Kittery, BHF-X-T0101(015), 13678**

The purpose of the presentation to the natural resource agencies was to provide a briefing on the status of the alternatives analysis and preparation of an Environmental Study for the Portsmouth Memorial Bridge (US Route 1) Rehabilitation Project. Nancy Mayville opened the meeting by providing a status update on the project and explaining that the study is being performed on the first bridge on the Piscataqua River, downstream of the I-95 Bridge and Sarah Long (Route 1 bypass) Bridge.

Nancy Mayville stated that the Portsmouth Memorial Bridge is half owned by the Maine Department of Transportation and half owned by the NHDOT. The project also involves replacement of the Scott Avenue Bridge, the Portsmouth bridge approach, which shares an abutment with Memorial Bridge and is owned by the City of Portsmouth.

Nancy Mayville indicated that structural inspections and bridge repairs were performed as part of the first phase of the study, and the second phase will involve refining alternatives developed in the first phase. In addition to structural alternatives, alternatives are also being evaluated for construction to allow either a complete bridge closure or alternating one-way traffic.

Nancy Mayville indicated that the current study includes a public involvement component. Meetings with the City of Portsmouth will be held later today, and it appears that a Public Officials Meeting with municipal officials in both Portsmouth and Kittery will most likely occur in early November. This will affect the draft schedule that was distributed. Nancy Mayville indicated that the handouts describe the scope of the study, the draft project schedule, and agency contacts made to date. Nancy Mayville introduced Addie Kim to provide more information on design and outreach activities.

Addie Kim indicated that an Environmental Study will be prepared to support a Categorical Exclusion determination under the National Environmental Policy Act. The first phase of the study included emergency repairs in May 2004 that allowed the weight restriction on the bridge to be lifted from 6 tons to 20 tons. The first phase looked at a range of options ranging from a tunnel, complete bridge replacement, to minimal rehabilitation. The condition of the Scott Avenue Bridge will require its complete replacement.

The two options for the Portsmouth Memorial Bridge being carried forward for further consideration are replacement and rehabilitation of the lift span. The first phase also involved preparation of a Draft Historic Structures Report that will serve as HAER documentation in the event that portions of the bridge are replaced.

The Portsmouth Memorial Bridge lifts 4,000 to 4,500 times a year to accommodate navigation on the Piscataqua River. Under any scenario, the movable parts of the bridge, the trunnion and sheaves (part of the pulley system), the equalizer that attaches to the counterweight, and the ropes will all be replaced. These parts have exceeded their calculated fatigue life and are being monitored on a 6-month inspection schedule. The lift span has a steel grate that allows salt to severely corrode the underlying steel members; there are steel girders whose webs are significantly deteriorated and other steel members that are 30% of their original size. Use of a solid deck is being studied that would also improve safety conditions for motorists and cyclists. Use of a solid deck surface would also require that upgrades to the movable system be made to carry the heavier load.

The bridge railing is not high enough to safeguard bicycle and pedestrians and does not meet AASHTO design criteria. The railing has failed in several locations and would most likely be replaced under any scenario. The operator's house, which currently is on the lift-span, will be relocated to the truss on the Portsmouth side of the bridge. The bridge fendering would also most likely be repaired.

In addition to the structural alternatives, options for construction would involve either complete closure to vehicular traffic over 1 to 1½ years or alternating one-way traffic over 2 to 3 years. Traffic intercept surveys have been performed to poll motorists, pedestrians, and cyclists as to their preferences. A business survey will be discussed with the City of Portsmouth to poll local businesses on their preferences and to evaluate business impacts.

The proposed work would involve staging from a barge, but no excavation in the Piscataqua River would occur. Concrete patching of bridge piers would be performed from a barge above the waterline. The U.S. Army Corps of Engineers and NH DES Wetlands Bureau jurisdictional boundary in Portsmouth is interpreted to be the seawall, which, based on a wetland delineation, is the "highest observable tide line" per New Hampshire Wetlands Bureau rules. As work will occur within 100 feet of this boundary, within the "Tidal Buffer Zone," a NH DES Wetlands Bureau permit may be required. The replacement of the Scott Avenue pier will occur proximal to the seawall, but no alterations to the seawall or work seaward of the seawall would occur for pier installation. On the Kittery side, patching of the viaduct would be performed by workers on foot, and no heavy construction equipment will be used or operated in marshes, so no wetland impacts will occur.

Federal and state agencies in New Hampshire and Maine and municipal officials were contacted to notify them of the project, request information that would be useful for the study, and inquire about issues of concern. The National Marine Fisheries Service, Protected Resources Division has indicated that no federally endangered or threatened species are known to occur in the project area, and the U.S. Fish and Wildlife Service in Maine has cited the bald eagle as the only federally protected species in the area. The Maine Department of Inland Fisheries and Wildlife and the Maine Natural Areas Program have not identified protected wildlife or significant wildlife habitats under the Maine Natural Resources Protection Act. The Maine Department of Marine Resources had concerns about seasonal restrictions for migratory species that inhabit the Piscataqua River.

A series of meetings will be held with public officials in both Portsmouth and Kittery. Public meetings will be held to obtain input into the development of alternatives, impact assessment, and identification of mitigation measures. Cultural resource investigations will include a determination of eligibility on the Memorial Park at the south end of the bridge. Both bridges have been determined to be eligible for listing on the National Register of Historic Places. The study will include coordination with cultural resource agencies in evaluating effects under Section 106 of the National Historic Preservation Act.

Questions and issues that were raised included the following:

- *Bill O'Donnell (Federal Highway Administration) inquired if the Scott Avenue Bridge approach (on the seaward side) would be filled with embankment and if it would be more cost-effective to provide fill under this approach.*

Nancy Mayville indicated that the existing approach is entirely an elevated structure, with a number of supporting piers, where it extends over Scott Avenue. The project will reduce the number of piers along Scott Avenue and along the waterfront. If it is a two-span, vehicular traffic will occupy one span and the future Riverwalk being planned by the City of Portsmouth would use the second span. Also the bridge workers park under the bridge.

- *Bill Ingham (New Hampshire Fish and Game Department) inquired if there was opportunity for salt marsh restoration as mitigation. He understood that there was a marsh adjacent to the bridge based on photographs he had seen.*

Addie Kim replied that the Portsmouth side of the river is built-up with constructed seawalls and tidal flats (but no marshes) below. The northeast quadrant in Kittery has the largest marsh area, but is rocky with some grasses (*Spartina sp.*), but the other (southeast) quadrant is largely developed. There is limited marsh adjoining the site, given the extent of development adjoining the bridge site.

Nancy Mayville indicated that the Maine Department of Transportation does not want to include major upgrades to the Kittery viaduct as part of this project. Minor repairs and patching will be performed as part of the contract.

- *A question was raised about sidewalks on the bridge.*

Nancy Mayville indicated that the project will involve consideration of upgrading sidewalks and improving conditions for pedestrians and cyclists. At present, the sidewalks consist of wood planks, and cyclists must walk bikes across the bridge because of the steel grating on the lift span. Solid decking is being considered that would provide a better driving surface and would allow cyclists to ride across the bridge, and improved sidewalks are being studied that would better accommodate the mix of uses currently accommodated on the sidewalks (bridge personnel, pedestrians, cyclists).

- *Mark Kern (U.S. Environmental Protection Agency) inquired as to whether bridge painting and deleading of the bridge will be required.*

Nancy Mayville indicated that painting and deleading of the bridge will be performed, but whether it will be included in this contract has not yet been determined. Containment measures would be used for any deleading and painting.

- *A question was asked about the repairs to the fendering.*

Bridge fendering repairs have been mandated by the U.S. Coast Guard, and this work would require replacement of planks 4 feet below the waterline. The fendering repairs may be performed as a separate project in advance of project construction.

#### **Portsmouth, STP-X-5379(027), 13523**

*No Minutes Prepared. For more information on this project, contact Ram Maddali at 271-3344.*

**Dover-Somersworth, STP-X-000S(252), 12608**

*No Minutes Prepared. For information on this project, contact Robert Landry at 271-2171..*

**Dover, STP-TE-X-5125(012), 12644**

*No Minutes Prepared. For information on this project, contact either Bob Landry at 271-2171 or Marc Laurin at 271-3226.*

**Monroe NH-Barnet VT, A000(336), 14095**

Discussion of the rehabilitation of this historic truss bridge that carries McIndoes Falls Road over the Connecticut River was undertaken. There will be no impacts associated with this project.